



2923-552.ST25  
SEQUENCE LISTING

<110> Bolhuis, Reinier  
Woehl, Thorsten  
Boettger, Volker

<120> Method of Producing Recombinant Antibodies

<130> 2923-552

<140> 10/635,908

<141> 2003-08-07

<160> 29

<170> PatentIn version 3.3

<210> 1

<211> 23

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<400> 1

gcatgcgcgc ggccgcggag gcc

23

<210> 2

<211> 35

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<400> 2

gcatgcgcgc ggccgcggag gcccccccc ccccc

35

<210> 3

<211> 48

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<400> 3

ctcttaagctt ggctcaaaca cagcgacctc ggatacagtt ggtgcagc

48

<210> 4

<211> 45

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<400> 4

ctcttctaga gagtctctca gctggtagga tacagtttgt gcagc

45

<210> 5  
 <211> 357  
 <212> DNA  
 <213> Mouse

<400> 5  
 gacgtgaagc tcgtggagtc tgggggaggc ttagtgaagc ttggagggtc cctgaaactc 60  
 tcctgtgcag cctctggatt cacttcagt aactattaca tgtctgggt tcgcccagact 120  
 ccagagaaga ggctggagtt ggtcgccagcc attaatagtg atggtggtat cacctactat 180  
 ctagacactg tgaagggccg attcaccatt tcaagagaca atgccaagaa caccctgtac 240  
 ctgcaaatga gcagtctgaa gtctgaggac acagccttgtt tttactgtgc aagacaccgc 300  
 tcgggctact tttctatgga ctactgggt caaggaacct cagtcaccgt ctccctca 357

<210> 6  
 <211> 119  
 <212> PRT  
 <213> Mouse

<400> 6  
 Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Leu Gly Gly  
 1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr  
 20 25 30

Tyr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Leu Val  
 35 40 45

Ala Ala Ile Asn Ser Asp Gly Gly Ile Thr Tyr Tyr Leu Asp Thr Val  
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr  
 65 70 75 80

Leu Gln Met Ser Ser Leu Lys Ser Glu Asp Thr Ala Leu Phe Tyr Cys  
 85 90 95

Ala Arg His Arg Ser Gly Tyr Phe Ser Met Asp Tyr Trp Gly Gln Gly  
 100 105 110

Thr Ser Val Thr Val Ser Ser  
 115

<210> 7  
 <211> 321  
 <212> DNA

2923-552.ST25

<213> Mouse

```
<400> 7
gacatttgta tgacccagtc tcaaagattc atgtccacaa cagtaggaga cagggtcagc 60
atcacctgca aggccagtc gaatgtggtt tctgctgttg cctggtatca acagaaacca 120
ggacaatctc ctaaactact gatttactca gcatccaatc ggtacactgg agtccctgat 180
cgcttcacag gcagtggatc tgggacagat ttcactctca ccattagcaa tatgcagtct 240
gaagacctgg ctgatTTTT ctgtcaacaa tatagcaact atccgtggac gttcgggtgga 300
ggcaccaagc tggaaatcaa a 321
```

<210> 8  
<211> 107  
<212> PRT  
<213> Mouse

<400> 8

Asp Ile Val Met Thr Gln Ser Gln Arg Phe Met Ser Thr Thr Val Gly  
1 5 10 15

Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asn Val Val Ser Ala  
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile  
35 40 45

Tyr Ser Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly  
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Met Gln Ser  
65 70 75 80

Glu Asp Leu Ala Asp Phe Phe Cys Gln Gln Tyr Ser Asn Tyr Pro Trp  
85 90 95

Thr Phe Gly Gly Thr Lys Leu Glu Ile Lys  
100 105

<210> 9  
<211> 2431  
<212> DNA  
<213> Mouse

```
<400> 9
tcatgacatt aacctataaa aataggcgta tcacgaggcc ctttcgtctt caagaattct 60
tcagatacaa agaatctcta aaccctgagg acattctatc acaaataagt aaaattcaga 120
aaattctgaa tgctcccatc acagagatga atctgctatg aacagctcat aggtgtgaag 180
```

2923-552.ST25

ctctacaaaa gccatattat tgaaaagcca cattgtgcc	240
tcatatcctg aaatacagt atgtgtgg	300
catggcagta tggaatgaa gcttgtctg tacacattaa cagaggaaa	360
tatggtaat ccctaacc aagtaaaaa aaaaaaaaa aagaaaagaa aagaaaaaaa	420
aagtgaaact acaatatgtt tcaa atgctg taactgaaat ctggtttt gatgcctt	480
atctgttac atcagtgact tcagat tagtccaaactcca gagcatggta tagcaggaag	540
acatgcaa at aggtcttctc tgtgccc atg aaaaacacct cggccctgac cctgcagctc	600
tgacagagga ggcctgtcct ggattcgatt cccagttcct cacattcagt gatcagcact	660
gaacacagac ccctcaccat gaacttcggg ctcagattga tttccttgc tctggttt	720
aaaggatct tattgagtat agaggacatc tgctgtatgc acagaggtgc agaaaaatg	780
ttgtttgtt ttttagtga caatgctcca aacagtattc tttcttgca ggtgtcctgt	840
gtgacgtgaa gctcgtggag tctggggag gcttagtgaa gcttggaggg tccctgaaac	900
tctcctgtgc agcctctgga ttcacttca gtaactattt catgtcttgg gttcgccaga	960
ctccagagaa gaggctggag ttggtcgcag ccattaatag tgatgggtt atcacctact	1020
atctagacac tgtgaagggc cgattcacca tttcaagaga caatgccaag aacaccctgt	1080
acctgcaa at gaggcgtctg aagtctgagg acacagccctt gttttactgt gcaagacacc	1140
gctcgggcta ctttctatg gactactggg gtcaaggaac ctcagtcacc gtctcctcag	1200
gtaagaatgg cctctccagg tctttttt aatctttgtt atggagttt ctgaacattt	1260
cagactaatc ttggatattt gtccctgagg tagccggctg agagaaattt ggaattaaac	1320
tgtctcggga tctcagagcc tttaggacag attatctcca catcttgaa aaactgagat	1380
tctgtgtat ggtgttgggag gagtcctgg atgatggat agggactttt gaggctcatt	1440
tgagggagat gctaaaacaa tcctatggct ggagggagag ttggggctgt agttggagat	1500
tttcagttt tagaataaaa gctttagctg cggaaatcc ttcaggacca cctctgtac	1560
agcatttata cagtatccga tgcataaggaa caaagagtgg agtggggcac tttcttcga	1620
tttggggat atgttccaca ctagttctg tgaaacctca tttgttggag ggagagctgt	1680
cttagtgcct gagtcaaggg agaaggcat ctagcctcg tctaaaagg gtagttctg	1740
tccagagagg tctgggtggag cctgc当地 cccagtttca aaaggaacac agaagtatgt	1800
gtatgaaata atagaagatg ttgc当地tac tcttaagttt gttcatagga aaaatagtt	1860
aaactgtgag ttggggatgt gagagggtt tcaagtactc attttttac atgtccaaa	1920
tttctgtcaa tcaattttagt gtctgtttt gtagaaactg acattactt aagtttacc	1980
gagggatggg agtggggctc tctcatacc tattcagaac tgacttttca caataataaa	2040
ttaagttttaa aatattttta aatgaatttga gcaatgttga gttggagtca agatggccga	2100

## 2923-552.ST25

tcagaaccag aacacctgca gcagctggca ggaaggcagg catgtggcaa ggctatttg	2160
ggaagggaaa ataaaaccac tagtaaact ttagtgcgtg gtttgaagaa gtggtttga	2220
aacacctgt ccagccccac caaaccgaaa gtccaggctg agcaaaacac cacctggta	2280
atttgcattt ctaaaataag ttgaggattc agccgaaact ggagaggtcc tcttttaact	2340
tatttagttc aacctttaa ttttagctt agtagttcta gtttcccaa acttaagttt	2400
atcgacttct aaaatgtatt tagaattcat t	2431

<210> 10  
 <211> 5557  
 <212> DNA  
 <213> Mouse

<400> 10	
aattccaagc tttgtatctt cagatccagg aaagccacca ccaatatcaa acagatacat	60
gctgaaacca acttctgttc ttatgtcaaa tgcacagcgg gcatctgaca ctgcctgcat	120
gaaggtctca ggtcaataact tccactacac acatggaagc tgacaccaat gacgtcaata	180
tttagctctt ttgcccattt caggaggaga ctgctggtt tgagtgtggc accagactta	240
acaccaagtc gacaaactgc tttggaatca tctgtgacaa tccacaaaaaa caactttgtc	300
ttacaatgtg ctctgacgac attcatcaat tcatttcaact gtcaaaagtc atcatctgga	360
ctccattact ggcagcatac ttgatttgag acacttggtt acaaaaatgt gcataggtaa	420
tcctctctgg aggaaccaga agcccccggtt ccaactgtat ttcaagtcttg cttgcacagt	480
caaattctgt accaatacgca gctagggtgt taactatggc tctgttgcc ttacacttga	540
ctgcacaaaaa aggaataaca ttcgaaagag ctttagcca cctcagatgc ttctttagaa	600
tgtctctgag gtccggaacc tagaaagaag agacttcatt tatttttg tgttcagaat	660
gtccttagca ctaaagccac catctatgtat acagcagtca aactttcct tagtatacg	720
gctcatcggtt ctccatgtgc ctacagaaaa cctagacatg gaattaaattt attgccagcc	780
ccttacaagg tcaacttatac caagaactgt gaatgcagac tcctgaaat gttggaaaca	840
ctcacagcac agggtaaga ctggctggac acatggagac actgaatcct gaagagcact	900
tagctgtctg ttgcttcattc atgtctactg acctgagggtg gcaccaagct gcttactgag	960
ggaggactgt ggcgggtct gcaggaactg acaattctcc acaattctct tactgcccc	1020
ctcataactc ttctcttctc catcttcttc tttcttccct ctccccctcct ttttcccttt	1080
cactacttt ttcctttctt ctttccact tccctttctt ttcttctttt gctgttgctg	1140
ttgtaaagga tttattgttt cctcgtgatt gaaccaaagg tagttgtact attatttctg	1200
taaaactcat ctgttgattt tctattaatt aattaattttt gtttacactc catattttat	1260
tcaaccctc catcctccata ctggcttaca taccataacct cttcccaaca cccctgtctc	1320

## 2923-552.ST25

cacatggatg	ctgccacctc	ccatgccacc	tgacctctca	tctccctagg	gcatctagtc	1380
tcttgggct	tagatgcac	atttctgagt	gaacacagat	ccaacaatcc	tctgctatat	1440
gtgtgttgg	ggcctcatag	cagctggtgt	atgctgcctg	tttggatc	cagtgttga	1500
gaggctcgc	ggggtcagat	taattgagat	tgttggacct	cctcagcgtc	tttcagtctt	1560
tccctgattc	aacaacaggg	ttcattgttt	ctgttcattt	gttgggtgca	aatatctgca	1620
tctgactcag	ctgcttattt	ggtcttctgg	agtgcagtca	tgcttagtcc	gtttctatga	1680
gtgctccata	gcctcagta	tagtgcagg	cgttggact	gcccccgtac	ctggattcta	1740
tttggacct	gtcgctggac	cttctttcc	tcaggctccc	ctccatctgt	atccctgtaa	1800
ttctttcaga	caggaacaaa	tatgggtcag	agttgtgagt	gtgaaatggc	accccccctcc	1860
ctcatttaat	gccctgtctt	cctggggaa	gtgggctcta	taagttccca	ctccctactg	1920
ttgggcattt	catccctttt	agtccctgaga	gtctctcacc	tcccaggtct	ctgggtgcatt	1980
ctggagggtc	ctcccaacct	cctacctccc	caggttgcct	gttgcacagac	ttctgctggc	2040
ccccagtgct	tcagtccttt	tccctcaccc	aatatctgat	ttggatggaa	gcctgtcatg	2100
agaacatcta	tatacttgc	gtttcagac	tttaaatgg	tccttgcgt	tctattttga	2160
gttccttcc	agtgattact	tgctgtctt	ggtgtactt	ttgactgttt	attnaacctg	2220
gatactctca	tacagctgtg	taatttactt	ccttatttga	tgactgcttt	gcatagatcc	2280
ctagaggcca	gcccagctgc	ccatgattt	taaaccaggt	cttgcagtg	agatctgaaa	2340
tacatcagaa	cagcatggc	ttcaagatgg	agtttcatac	tcaggtcttt	gtattcgtgt	2400
ttctctgg	gtctggtag	aattttaaaa	gtattataac	atctcaaaag	taatttattt	2460
aaatagctt	tcctatagga	agccaatatt	aggcagacaa	tgccattttaga	taagacattt	2520
tggattctaa	catttgc	aaaaatctt	gtatataaa	gtgtttactc	attatctatt	2580
tctgattgca	ggtgttgatg	gagacattgt	gatgaccag	tctcaaagat	tcatgtccac	2640
aacagtagga	gacagggtca	gcatcacctg	caaggccagt	cagaatgtgg	tttctgctgt	2700
tgcctggat	caacagaaac	caggacaatc	tcctaaacta	ctgatttact	cagcatccaa	2760
tcggtacact	ggagtccctg	atcgcttcac	aggcagtgg	tctggacag	atttcactct	2820
caccattagc	aatatgcagt	ctgaagacct	ggctgatttt	ttctgtcaac	aatatagcaa	2880
ctatccgtgg	acgttcggtg	gaggcacca	gctggaaatc	aaacgtaaat	agaatccaaa	2940
ctctcttct	tccgttgct	atgtctgtgg	tttctatgtc	taaaaatgtat	gtagatattt	3000
tttctctgag	accagattct	gtcactctcc	aaggcaaaga	tacatagtca	ctccgtaa	3060
agagctggaa	ataggctaga	catgttctct	ggagaatgaa	tgccagtgt	ataattaaca	3120
caagtat	tttcagaaat	gctcaaagaa	gcagggtagc	ctggccctaga	caaaccctta	3180

2923-552.ST25	
cttggtgctc	agaccatgct cagttttgt atgggggtt agtgaaggga caccagtgt
tgtatacggt	cgaggggggg accaagctgg aaataaaaacg taagttgtct tctcaactct
tgttcactga	gtctaacctt gttactttgt tctttgtgt gtgttttct taaggagatt
tcaggatgt	atcaaattcc attctcagat cagggtttaa ggagggaaaa cttgtcccac
aagaggttgg	aatgattttc aggctaaatt ttaggcttct aaaccaaagt cattaaacta
gggaaagagg	gataattgtc tgcctaggga gggtttgtg gaagtacagt taaagttagat
cactgtaaac	cacattcaga gatgggacca gactggaaat aaaacctaag aacattttg
ctcaactgct	tgtgaagttt tggtcccatt gtgtccttgc tggtagtttggtagttcat
tagataaaatg	aactattcct tctaacccaa aacttaaata gacgagaacc aaaaatctag
ctactgtata	agttgagcaa acagactgac ctcatgtcag atttgggaa gaaatgagaa
aggaacagtt	tttctctgaa cttggcctat ctaactggat cagcctcagg caggttttg
taaagggggg	cacagtgata tgaatcactg tgattcacgt tcggctcggg gacaaagttt
gaaataaaac	gtaagtagat tttgctcat ttacttgta cgtttgggt ctgtttgggt
aactcggtg	aatttggac aatttggcta aatgagccat tcctggcaac ctgtgcacatca
atagaagatc	ccccagaaaa gagtcagtgt gaaagctgag cgaaaaactc gtcttaggt
tctgagacca	gtttttaag gggaaatgttag aagaaagagc tgggctttc ctctgaattt
ggcccatcta	gttggactgg cttcacaggc aggtttttgt agagggggc atgtcatagt
cctcactgtg	gctcacgttc ggtgctggg ccaagctgg gctgaaacgt aagtacactt
ttctcatctt	tttttatgtg taagacacag gtttcatgt taggatcaa agtcagtca
aaaaatctt	agaaaatggg gagggtctat tatcagttga cgtggcatac agtgcagat
tttctgtta	tcaagctagt gagattaggg gaaaaagag gcttttagttg agaggaaagt
attaatact	atggtcacca tccaagagat tggaccggag aataagcatg agtagttatt
gagatctggg	tctgactgca ggtagcgtgg tcttctagac gtttaagtgg gagatgggg
ggggatgagg	aatgaaggaa cttcaggata gaaaaggctt gaagtcaagt tcagctccta
aatggatgt	gggagcaaac tttgaagata aactgaatga cccagaggat gaaacagtgc
agatcaaaga	ggggcctgg gctctgagaa cagaaggaga gtcattcgtg ttgagttcc
acaaatactg	tctttagttt tgcaataaaa gtggatagc agagttgagt gagccatagg
ctgagttctc	tctttgtct cctaagtttt tatgactaca aaaatcagta gtatgtcctg
aaataatcat	taaactgttt gaaagtatga ctgcttgcca tggatacc atggcttgc
gaataatcag	aagaggtgtg actcttattc taaaattgtt cacaatgt caaaatgaga
gactctgtag	gaacgagtcc ttgacagaca gctcaagggg ttttttcct ttgtctcatt
tctacatgaa	agtaaatttg aaatgatctt ttttattata atagtagaaa tacagttggg
	5100

2923-552.ST25

tttgaactat atgtttaat ggccacggtt ttgtaagaca tttggccctt tgttttccca	5160
gttattactc gcttgttaatt ttatatcgcc agcaatggac tgaaacggtc cgcaacctct	5220
tcttacaac tgggtgacct cgccggctgtg ccagccattt ggcgttcacc ttgccgctaa	5280
ggccgtgtg aaccccccag tagcatccc ttgctccgcg tggaccactt tcctgaggca	5340
cagtgtatagg aacagagcca ctaatctgaa gagaacagag atgtgacaga ctacactaat	5400
gttagaaaaaa caaggaaagg gtgacttatt ggagatttca gaaataaaat gcatttatta	5460
ttatattccc ttatTTaat tttcttattag ggaattagaa agggcataaa ctgctttatc	5520
cagtgttata ttaaaagctt ttttttttc agtgcta	5557

<210> 11  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> Synthetic Construct

<400> 11  
gaggttcctt gaccccagt

19

<210> 12  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> Synthetic Construct

<400> 12  
cgattccag ttcctcaca

19

<210> 13  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> Synthetic Construct

<400> 13  
aacgtccacg gatagttgct

20

<210> 14  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> Synthetic Construct

<400> 14

cagaacagca tgggcttca

<210> 15  
 <211> 214  
 <212> PRT  
 <213> Mouse

&lt;400&gt; 15

Asp Ile Val Met Thr Gln Ser Gln Arg Phe Met Ser Thr Thr Val Gly  
 1 5 10 15

Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asn Val Val Ser Ala  
 20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile  
 35 40 45

Tyr Ser Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly  
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Met Gln Ser  
 65 70 75 80

Glu Asp Leu Ala Asp Phe Phe Cys Gln Gln Tyr Ser Asn Tyr Pro Trp  
 85 90 95

Thr Phe Gly Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala  
 100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
 130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln  
 145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser  
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr  
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser  
 195 200 205

Phe Asn Arg Gly Glu Cys

210

<210> 16  
<211> 449  
<212> PRT  
<213> Mouse

<400> 16

Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Leu Gly Gly  
1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr  
20 25 30

Tyr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Leu Val  
35 40 45

Ala Ala Ile Asn Ser Asp Gly Gly Ile Thr Tyr Tyr Leu Asp Thr Val  
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr  
65 70 75 80

Leu Gln Met Ser Ser Leu Lys Ser Glu Asp Thr Ala Leu Phe Tyr Cys  
85 90 95

Ala Arg His Arg Ser Gly Tyr Phe Ser Met Asp Tyr Trp Gly Gln Gly  
100 105 110

Thr Ser Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125

Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
130 135 140

Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
180 185 190

Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
195 200 205

Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
Page 10

2923-552.ST25

210

215

220

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
225 230 235 240

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
245 250 255

Arg Thr Pro Glu Val Thr Cys Val Val Asp Val Ser His Glu Asp  
260 265 270

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
275 280 285

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
290 295 300

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
305 310 315 320

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
325 330 335

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
340 345 350

Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
355 360 365

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
370 375 380

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
385 390 395 400

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
405 410 415

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
420 425 430

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
435 440 445

| vs

## 2923-552.ST25

<210> 17  
<211> 214  
<212> PRT  
<213> Mouse

<400> 17

Asp Ile Val Met Thr Gln Ser Gln Arg Phe Met Ser Thr Thr Val Gly  
1 5 10 15

Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asn Val Val Ser Ala  
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile  
35 40 45

Tyr Ser Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly  
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Met Gln Ser  
65 70 75 80

Glu Asp Leu Ala Asp Phe Phe Cys Gln Gln Tyr Ser Asn Tyr Pro Trp  
85 90 95

Thr Phe Gly Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala  
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln  
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser  
165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr  
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser  
195 200 205

Phe Asn Arg Gly Glu Cys  
210

<210> 18  
<211> 449  
<212> PRT  
<213> Mouse

<400> 18

Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Leu Gly Gly  
1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr  
20 25 30

Tyr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Leu Val  
35 40 45

Ala Ala Ile Asn Ser Asp Gly Gly Ile Thr Tyr Tyr Leu Asp Thr Val  
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr  
65 70 75 80

Leu Gln Met Ser Ser Leu Lys Ser Glu Asp Thr Ala Leu Phe Tyr Cys  
85 90 95

Ala Arg His Arg Ser Gly Tyr Phe Ser Met Asp Tyr Trp Gly Gln Gly  
100 105 110

Thr Ser Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125

Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
130 135 140

Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
180 185 190

Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
195 200 205

Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
210 215 220

2923-552.ST25

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
225 230 235 240

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
245 250 255

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp  
260 265 270

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
275 280 285

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
290 295 300

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
305 310 315 320

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
325 330 335

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
340 345 350

Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
355 360 365

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
370 375 380

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
385 390 395 400

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
405 410 415

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
420 425 430

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
435 440 445

Lys

<210> 19  
<211> 5  
<212> PRT

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> CARBOHYD

<222> (5)..(5)

<400> 19

Glu Glu Gln Tyr Asn  
1 5

<210> 20

<211> 5

<212> PRT

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> MOD\_RES

<222> (5)..(5)

<223> AMIDATION

<400> 20

Val Ser Ile Thr Cys  
1 5

<210> 21

<211> 5

<212> PRT

<213> Artificial

<220>

<223> Synthetic Construct

<400> 21

Leu Ile Val Ser Leu  
1 5

<210> 22

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Synthetic Construct

<400> 22

Ser Gly Thr Ala Ser Val Val Cys Leu Leu  
1 5 10

<210> 23  
<211> 5  
<212> PRT  
<213> Artificial

<220>  
<223> Synthetic Construct

<400> 23

Thr Lys Pro Arg Glu  
1 5

<210> 24  
<211> 5  
<212> PRT  
<213> Mouse

<400> 24

Asn Tyr Tyr Met Ser  
1 5

<210> 25  
<211> 17  
<212> PRT  
<213> Mouse

<400> 25

Ala Ile Asn Ser Asp Gly Gly Ile Thr Tyr Tyr Leu Asp Thr Val Lys  
1 5 10 15

Gly

<210> 26  
<211> 8  
<212> PRT  
<213> Mouse

<400> 26

Ser Gly Tyr Phe Ser Met Asp Tyr  
1 5

<210> 27  
<211> 11  
<212> PRT  
<213> Mouse

<400> 27

Lys Ala Ser Gln Asn Val Val Ser Ala Val Ala  
1 5 10

2923-552.ST25

<210> 28

<211> 7

<212> PRT

<213> Mouse

<400> 28

Ser Ala Ser Asn Arg Tyr Thr  
1 5

<210> 29

<211> 9

<212> PRT

<213> Mouse

<400> 29

Gln Gln Tyr Ser Asn Tyr Pro Trp Thr  
1 5